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IN THE

UNITED STATES CIRCUIT COURT

FOR THE

NORTHERN DISTRICT OF NEW YORK,

IN EQUITY.

JAMES G. WILSON and JOHN GIBSON,
vs.
GEORGE W. BEARDSLEE

Affidavits on the part of the Defendant, to oppose Application
for Injunction.

P. CAGGER, *Solicitor for Defendant.*
C. W. NEWTON, *Solicitor for Complainants.*

ALBANY:
JOEL MUNSELL, LAW PRINTER.
1851.

UNITED STATES CIRCUIT COURT

IN THE DISTRICT OF COLUMBIA

IN EQUITY

JOHN J. HARRIS, Plaintiff,

vs.

JOHN J. HARRIS, Defendant.

Filed for record this 1st day of January, 1901.

JOHN J. HARRIS,
Plaintiff.
JOHN J. HARRIS,
Defendant.

IN THE
UNITED STATES CIRCUIT COURT
FOR THE
NORTHERN DISTRICT OF NEW YORK,
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vs.
GEORGE W. BEARDSLEE

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UNITED STATES CIRCUIT COURT,

NORTHERN DISTRICT OF NEW YORK—*In Equity.*

NOTE.—The affidavits, of which the annexed are copies, were prepared to oppose an application for an injunction. Mr. Beardslee appeared at Cooperstown on the 6th of August, 1851, pursuant to notice, with his counsel, R. G. Beardslee, John K. Porter and N. Hill, jr., Esqs., prepared to resist the motion for an injunction; but the complainants' solicitor, upon whom copies of the affidavits had been served, declined to make the motion, and the order granted by his honor Judge Nelson, was accordingly vacated.

igation that it was an invention of undoubted novelty, and which could not fail of producing extraordinary results, he watched its progress with deep interest, and traced it in its construction, part by part, with reference to its principles of action, and mode of operation.

This deponent further says that he has had the most favorable opportunities for observing the Beardslee machine in practical operation; that he is thoroughly acquainted with all its principles and combinations; and that he has carefully examined the specifications of the defendant, as well as the two models of his machine, one of which was transmitted to the patent office, and

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UNITED STATES CIRCUIT COURT,

NORTHERN DISTRICT OF NEW YORK—*In Equity.*

JAMES G. WILSON and JOHN GIBSON,

vs.

GEORGE W. BEARDSLEE.

City and County of Albany, ss :

William McCammon of the city of Albany, being duly sworn, deposeth and saith: that he is forty years of age; that he is a mechanical engineer and draftsman; that he is now the superintendent of the Albany Water Works; that for twenty-four years he has devoted himself to the investigation of scientific principles as applied to the construction and operation of machinery; that he has been acquainted with the Woodworth planing machine 3 for about twenty years; that he has at various times constructed parts of such machine, and repaired those which were in operation; that he is entirely familiar with the principles of said machine, its combinations, construction and mode of operation, and with the description and claims of the original and amended specifications of the Woodworth patent.

This deponent is also well acquainted with the planing machine of the defendant Beardslee, now in operation at the furnace of the Messrs. Townsend, in the city of Albany. His attention 4 was called to it at an early period in the progress of the invention, by Mr. Franklin Townsend, and being satisfied upon investigation that it was an invention of undoubted novelty, and which could not fail of producing extraordinary results, he watched its progress with deep interest, and traced it in its construction, part by part, with reference to its principles of action, and mode of operation.

This deponent further says that he has had the most favorable opportunities for observing the Beardslee machine in practical 5 operation; that he is thoroughly acquainted with all its principles and combinations; and that he has carefully examined the specifications of the defendant, as well as the two models of his machine, one of which was transmitted to the patent office, and

6 the other is now in the possession of said Beardslee. Each of
 said models was completed before the machine, and both are cor-
 rect representations thereof, except that the model at the patent
 office has a scorer in front of the head knife, which was not in-
 troduced either into the other model or the machine itself, as the
 same was actually constructed.

This deponent further says that he has perused the copies of the
 bill of complaint and moving affidavits in this cause; and that
 the same convey an entirely erroneous idea of the Beardslee and
 the Woodworth planing machines as compared with each other
 7 in their respective combinations and principles of action; and
 that this fact can not fail to appear to any scientific mechanic
 after a thorough examination of the two machines, and after
 seeing them both in practical operation.

Not only is the Beardslee machine utterly unlike the Wood-
 worth machine in any of the various forms in which it has been
 constructed at different periods, but there is nothing whatever in
 the claims of the Woodworth patent which in the slightest de-
 gree interferes with the Beardslee machine as the same is con-
 structed, nor any thing in the claims of the Beardslee patent
 8 which in the slightest degree interferes with the Woodworth ma-
 chine, as the same is now constructed, or as it has heretofore
 been constructed.

The two machines are utterly unlike in every essential feature.

The Beardslee machine is constructed with an endless sectional
 platform. This is an old device well known long before the first
 Woodworth patent. The board is introduced vertically between
 the feed rollers and the moving plates of the platform. It is car-
 ried into the machine by the joint action of the plates and the
 rollers. The edges of the knives are in one sense stationary, and
 9 remain in the same relative position to the board and the bed,
 whether the heel of the stock rises or falls. The stocks to which
 they are attached are hung upon hinges. The centre of the axle
 of these hinges is in the precise line of the edge of the knife.
 Thus the heel of the stock is elastic, while the cutting edge re-
 tains its apparent fixed position. The first knife has a stationary
 throat. As the end of the board is brought into contact with the
 knife, a shaving is removed which passes out through the fixed
 throat, and takes off the entire upper surface of the board from
 one end to the other. As the end of the board passes from the
 10 first knife it comes in contact with the second. Another shaving
 is removed, which passes out between the cutting edge of the
 knife and the heel of the first stock. This heel being elastic,
 rises and forms a self-adjusting throat, to make way for the shav-
 ing. So the process continues through the entire series of knives
 and stocks. In the meantime the board is driven through,
 after it passes the feeding rollers, by the board which is entering

behind it. There is, however, this difference between the first 11
and the succeeding knives. The stock to which the first knife is
attached has a double spring, and is thus made elastic as well at
the cutting edge as at the heel. By this novel and ingenious ar-
rangement, the first stock with its cutting edge descends, if the
board be thin, so as to take its given shaving, and if the board
be thick, rises to take its allotted portion and no more; and this
without changing its relative position by advancing or receding.
It thus becomes a jacker, removes the gritty surface of the board,
and saves the edges of all the succeeding knives. By this means,
in case of inequality in the board, the unequal shaving is remo- 12
ved by the second knife, which is provided with a self-adjusting
throat by the heel of the preceding stock. The succeeding
knives are graduated in a descending series, so as to produce a
more perfect smoothness of surface, the greater bulk being re-
moved by the foremost knives.

It would scarcely be possible to construct two machines for
planing boards more radically dissimilar in their principles, com-
binations and mode of operation, than the Beardslee and the
Woodworth machines.

The very first principle of the Woodworth machine is that the 13
surface is removed from the board by rotating knives. In the
Beardslee machine it is removed by line planes. In the one, the
cutter is in motion; in the other, it remains at rest. In the one,
the knife is active; in the other, it is purely passive. In the one,
the cut is from the line of contact *upward*; in the other, it is from
the line of contact *forward, and parallel with the board*. In the
one, there is a multiplicity of successive cuts; in the other, the
cut is steady and continuous from one end of the board to the
other. In the one, the surface is reduced by innumerable clip-
pings; in the other, by unbroken shavings, equal in width and 14
length to the board.

In the Woodworth machines, the knives are all alike in their
operation; in the Beardslee machine, each knife has its own pe-
culiar and appropriate office. The first machine produces an un-
dulating surface; the other, a plane surface. They attain dif-
ferent results by the use of different means. The upward cut of
the rotating plane tends to lift the board *from the bed*; the par-
allel cut of the line plane tends to hold the board *to the bed*.
The upward tendency of the revolving cutters in the Woodworth
machine requires the pressure roller to counteract it. In the 15
Beardslee machine there is no upward cut, nor the consequent
upward tendency, and no pressure roller is either used or required.

A specification which would convey a perfect idea of the one
machine, would convey no idea whatever of the other. The line
cutters of the Beardslee machine could not be used in the Wood-
worth machine. The rotary cutters of the last could not be used

- 16 in the first. The elastic stocks of Beardslee could not be used in the Woodworth machine, nor could the pressure roller of that machine be used in the Beardslee machine. In the Beardslee machine, the board passes through on a straight line. In the Woodworth machine it passes through on a curved line, the board being depressed below a right line at the point of contact with the cutters, by the action of the pressure roller. The curved line would be entirely inappropriate with the Beardslee machine, and the right line entirely inappropriate with the Woodworth machine. In Beardslee's machine, the whole power is expended
- 17 in the feeding process. If so expended in the other, it would be impossible to plane at all, for the revolution of the cutters would be suspended. The Woodworth gearing is necessarily attached to the machine itself. The Beardslee gearing is all beneath the floor, out of the way of the operator and the work. The Woodworth machine necessarily requires an amount of gearing, pulleys and belts, greatly beyond the amount required in the Beardslee machine. The speed required in the Woodworth machine to plane a given quantity of lumber in a given time, very greatly exceeds the speed required for that purpose with the Beardslee machine.
- 18 The velocity of the Woodworth cylinder is necessarily limited; but the capacity of the Beardslee machine is equal to the power of the operator to supply the same with boards to be planed. The power required to plane one hundred and fifty feet of boards per minute with the Beardslee machine, is very far less than the power required by the Woodworth machine to plane thirty feet per minute. This deponent from his knowledge of the practical operation of the two machines, can state with entire confidence that it is utterly impossible for a machine constructed on the plan of the Woodworth planing machine, to plane as much lumber in
- 19 a week, as the Beardslee planing machine can plane in a single day. It is equally impossible for any machine built on the plan of the Woodworth planing machine, to produce upon its work a uniformity or smoothness and beauty of surface equal to that which is uniformly produced by the Beardslee planing machine in practical operation. The great degree of speed required by the Woodworth machine in practical use is necessarily attended with a degree of hazard to the operator, and a risk of injury to the machine itself; which is avoided in the operation of the Beardslee machine. It is a familiar principle in mechanics, that,
- 20 other things being equal, the danger of accident and derangement increases with increasing velocity. On the principle upon which the Woodworth machines are constructed, the knives require very frequently to be sharpened, and the readjustment of the cutters requires great precision and skill. Upon the principle of the Beardslee machine, the knives rarely require to be sharpened, and

the process of readjustment is so simple that it can be effected 21
without the slightest difficulty, and with perfect precision, by the
most inexperienced workman.

This deponent further says, that even if the machines were in
other respects analagous, instead of being as they are, utterly
dissimilar, there is a fundamental difference in principle between
the line cutters and the rotary planes. Either may be used to
plane boards, but in attaining that general end, they produce dif-
ferent results by different means, and by modes of operation be-
tween which there is neither analogy nor resemblance. The rota-
ry cut is like the cut of the adze in its operation. It is as if the 22
cutter was a segment of the periphery, with the radius of the
cylinder for its handle. In other words the rotating cutters as
they revolve are substantially a series of adzes, and cut the board
in vertical curves, extending from the planed portion upward,
and producing a grooved or waving surface. If the adze was thus
used by hand upon a board, the tendency of each stroke would
be to lift the board from the ground, and the foot of the operator
would be planted upon the board to counteract the tendency of
the upward cut, and prevent the board from rising with the adze,
thus serving the purpose of the Woodworth pressure roller. 23

In the Beardslee machine on the contrary, the line cutters are
substantially a series of hand planes, from the jacker down to
the smoothing plane, firmly secured together, the one in front of
the other, each held by a human arm, corresponding with the
elastic stock, each plane having a throat corresponding with the
space between the cutting edge and the heel of the elastic stock,
the work bench being placed on ways, and the board being borne
against the planes with the moving bench, corresponding with
Beardslee's endless sectional platform. The tendency with the
series of planes is to hold the board down to the bench, the cut 24
being in a right line; which is directly opposite to the tendency
of the adze or upward cut. Hence the pressure roller, which is
indispensible in the Woodworth machine, would be entirely out
of place in the Beardslee machine. The end to be obtained
is not the same in the two machines, and there is no anal-
agous device to attain a common object. Both the ends to be
reached, and the means used to reach them, are of an opposite
character. And the effect of the line cutter is to produce a plane
surface, instead of the corrugated surface made by the revolving
cutters. 25

The heels of the elastic stocks in the Beardslee machine, when
not in operation, are below the cutting edges of the knives. The
effect of this arrangement is that as the board enters the machine
and passes the first knife, it raises the heel of the first stock to
the line of the first cutting edge, which is precisely the thickness

26 of the next shaving required above the cutting edge of the second knife, thus leaving a throat of exactly the width required between the heel of the first stock and the second cutting edge; and so through the whole series, the edge of each knife entering the board behind the stock so raised, in a line precisely parallel with the plane of the board. In case of any loose knot or fragment in the board, the throat expands to make room for its escape, and returns instantly to its appropriate position.

The feed rollers in the Woodworth machine, are not pressure rollers in the mechanical sense of that term as used in the Woodworth patent. 27 The pressure roller in that machine is placed after the cut, and operates upon the board as the end passes beneath it, and the balance of the board is being planed. In the Beardslee machine the feed rollers are not properly pressure rollers, nor do they serve the purpose of pressure rollers as claimed in the Woodworth patent. The vertical line of the nearest feed roller is about a foot in front of the first knife. The board advances in a right line, and after it has passed beyond the feed rollers the operation of planing ceases at once, unless another board is behind it driving it forward; and in that case the operation of 28 planing goes on upon the first board as perfectly as when it was passing the feeding rollers.

This deponent further states that his attention was directed to the antiquity of the principle of stationary knife planing machines by an advertisement of the complainant, James G. Wilson, in the Boston Times of 25th May, 1849, which publication this deponent has before him at the time of making this affidavit, and of which printed advertisement the following is a copy.

“PLANING MACHINES.

29 “ I take this method of answering the frequent inquiries, by letter and otherwise, as to my opinion upon the various notices through the papers of the Stationary Knife Planing Machines, attempted to be palmed off upon persons ignorant of their true worth. I would state for the information of the inquirers, that they will find substantially the machine now offered by several pretending inventors, described in the 10th volume of the Repertory of Arts, invented by Samuel Bentham, in the year 1791. A like machine was patented in this country by one Kugler, some 16 years since. One of these machines was put up in Philadel- 30 phia, and abandoned some 10 years since, and another one put up by Albert Richards of West Troy, N. Y., and abandoned about the same time. It ought to satisfy the public to know that after 58 years experimenting upon these machines, not one in use is of any value for the purposes contemplated

I will furnish a Stationary Knife Machine equal to any now in 31
use, or to any offered by the pretending inventors, at the cost of
the machine and 5 per cent. for my trouble.

JAMES G. WILSON,
Philadelphia."

May 19, 1849.

This deponent further says, that he thereupon proceeded to in-
vestigate the subject, and found in the New York State Library
the volume referred to in said advertisement, and also the previ-
ous volumes of the same work; that he found in this volume at 32
page 222, a note referring to the fifth volume of the Repertory
of Arts; that both of such volumes purport to have been purchased
for the State Library, in Dec. 1818; the tenth volume having been
published in 1799, and the fifth volume in 1796, as appears by the
title pages thereof; that in the fifth volume he found the published
specifications of the first patent of Samuel Bentham "for his inven-
tion of a new method of planing wood," said specification being
quite voluminous, and the same now lying before him; that he
found clearly described therein, the process of planing boards
with a series of line cutters; that he also found clearly described 33
therein, weighted stocks in combination with the line cutters, and
weighted rollers to keep the board down to the bed or bench
while subjected to the planing process; that he also found clearly
described therein, a series of line cutters of sufficient number to
plane the board to a uniform thickness in one operation, and a
series of line cuts as forming tongues and grooves in one opera-
tion with planing the surface of the board; but that he found
therein no description or suggestion of what he regards as the
new and important principle in the invention of Mr. Beardslee,
of cutting edges relatively stationary upon the central line which 34
governs the movement of the heel of the stock, which makes the
Beardslee machine superior to all the planing machines that this
deponent ever saw, or of which he ever heard. .

This deponent further says, that there is not, nor has there been
any matcher, or tonguing, or grooving machine attached to the
Beardslee machine; and that it would be utterly impracticable
to adapt thereto, or use therewith, the tonguing and grooving
machine of the complainants, or any thing analagous thereto;
that it is hardly possible that said Beardslee should have been enga-
ged in the construction of such machine, without this deponent 35
being acquainted with that fact, and that to the best of his know-
ledge and belief there is no foundation whatever for the allega-
tion in that behalf contained in the bill of complaint in this
cause.

This deponent further says, that he has not, nor has he ever

36 had, any interest whatever in the Beardslee planing machine, or in the patent which the defendant has obtained therefor.

WILLIAM McCAMMON.

Sworn before me this 28th day of July, 1851,

PAUL F. COOPER, *United States Commissioner*
to take affidavits in and for the Northern District of New York.

UNITED STATES CIRCUIT COURT, } *In Equity.*
NORTHERN DISTRICT OF NEW YORK.

37 JAMES G. WILSON and JOHN GIBSON,
vs.
GEORGE W. BEARDSLEE.

City and County of Albany, ss :

38 *William W. Cook* of Whitehall in the county of Washington and state of New York, being duly sworn deposeth and saith, that he is forty-six years of age; that he is a practical mechanic, and has been very extensively engaged in the lumber and steam planing mill business; that for the last fifteen years he has used and constructed planing machines of the kind commonly known as the Woodworth machine; that he is thoroughly and intimately acquainted with the same, and with each and every of its parts, and with its construction, principles, combinations, mode of operation and results. He is also thoroughly conversant with the description and claims of the original and the amended specifications of the Woodworth patent.

39 He further states that he is thoroughly conversant with the planing machine invented and patented by the defendant George W. Beardslee; that he saw it from time to time while the invention was in progress; that he has examined it carefully and minutely in all its parts since its completion; that he has seen it in operation at different times; and is familiar with its construction, principles, combinations, mode of operation and results.

He further states that he has carefully perused the copy bill of complaint in this cause served on the defendant with the order to show cause, and the copies of certain affidavits thereto attached purporting to be made by Daniel Barnum, Alexander McHench, William V. Many, George Rork and James G. Wilson, one of the complainants.

40 This deponent further says that the description of the Beardslee planing machine as compared with the Woodworth planing machine in said bill of complaint and affidavits is erroneous, and evidently arises from a misconception of the principles and operation of the Beardslee machine, as will appear at once by an inspection and examination of the two machines.

He further says that the claim of the owners of the Woodworth 41 patent is, and has always been since the year 1845, the employment of *rotating* planes in *combination* with rollers or any analagous device to prevent the boards from being *drawn up* by the planes when *cutting upwards*, or from the reduced or planed to the unplanned surface.

He further says that the Beardslee machine does not contain this combination, nor does it contain either of the elements of such combination, or any analagous device whatever.

He further says that the two machines are entirely and radically dissimilar in their respective construction, principles, combinations, mode of operation and results. 42

In the Woodworth machine, the surface of the board is reduced by *rotating* planes; in the Beardslee machine the surface is reduced by *straight planes, or line cutters*, and not by rotating planes or any analagous device whatever.

The *power* in the Woodworth machine is mainly expended in driving the rotating cutter wheels; but in the Beardslee machine, the whole power is expended exclusively in feeding the board or other material to be planed through the machine.

In the Woodworth machine, the tendency of the rotating planes 43 in the process of *cutting upwards*, is to raise the board from the bed, and lift it upwards toward the centre of the cutter wheels. In the Beardslee machine, the straight planes cutting *forward in a right line* instead of cutting upwards, there is no such tendency to raise the board from the bed, the board being planed in the direction of the grain on the principle of the hand plane.

In the Woodworth machine, the board after it gets beyond the rotating planing cylinder, passes under a roller called a pressure roller, which is used and designed to counteract the tendency of the *rotating planes* to lift the board from the bed. In the Beards- 44 lee machine no such tendency exists, and no pressure roller nor any other analagous device is used therein to counteract any such tendency. Nor is there in the Beardslee machine, with the exception of the feed rollers, any roller whatever: nor is there any device whatever analagous to a pressure roller, or serving, or designed to serve the purpose for which the pressure roller is used and claimed in the Woodworth machine; nor is there in his machine any pressure roller or other analagous device whatever "to keep the boards, &c. steady, and prevent the cutters from drawing the boards toward the centre of the cutter wheels whilst 45 it is moved through by machinery."

The feed rollers in the Beardslee machine do not serve, nor are they designed to serve the purpose of the pressure roller in the Woodworth machine, nor to contribute to any such purpose. Nor in the Woodworth machine do the feed rollers serve the purpose which is claimed for the pressure roller under that patent,

46 and which the pressure roller serves in fact in that machine. Nor in the Woodworth machine is there any thing analagous to the endless sectional platform as combined with the feed rollers in the Beardslee machine; but this device in the Beardslee machine is equally beautiful, simple and novel in its operation, and very far superior to any mechanical device heretofore used in any machine which this deponent has ever seen among those known as the Woodworth planing machines.

The mode of cut used in the Woodworth machine, requires no throat whatever, and the rotating planes accordingly have no
47 throats. In the Beardslee machine, the mode of cut is like that of the hand plane, to which a throat is indispensable. Each cutter in his machine is provided with a throat, the first with a stationary throat, and each of the others with a throat formed by the heel of the stock to which the knife before it is attached; and these throats are made variable by the elastic stocks, which hold the grain of the board *close to the cutting edges, along the entire series of knives*, as the board passes through the machine.

The Beardslee and Woodworth planing machines are also en-
48 tirely dissimilar in the results produced. In the Woodworth planing machine, the mode of operation is such that a true plane is not and cannot by possibility be produced upon the surface of the board. The upward and revolving cut of the rotating knife necessarily produces an unequal waving surface by a series of concave cuts extending from one end of the board to the other. The Beardslee machine on the contrary makes a perfect plane, producing a smoothness and beauty of surface, not only greatly superior to the work of the Woodworth machine, but far superior even to what can be accomplished with the hand plane by the
49 most expert and skilful workman.

In the Woodworth machine the use of the rotating planes creates a difficulty by the upward tendency of the cut which cannot be obviated except by the pressure roller, and by that only in part. The pressure roller, on account of the size of the cylinder is necessarily placed about six inches back of the line of contact between the knife and the board; and the effect is that about six inches of the first end of the board is scored below the general surface in consequence of its being lifted from the bed by the rotating cutters before it is subjected to the
50 action of the pressure roller. Thus about six inches is lost by the public in every board planed, except where the use for which it is designed is such that an unequal and depressed surface is not a controlling objection. If the pressure roller in the Woodworth machine was elastic, this scoring would extend to a still greater distance upon the board, as the yielding of the roller would prevent it from at once counteracting the effect of the cut-

ters in raising the board. For this reason a fixed roller is used 51 in the Woodworth machine to serve the purpose of a pressure roller, and the same is not in fact elastic.

In the Beardslee machine on the contrary, the rotating planes are not used, and thus the upward tendency is avoided, and the pressure roller is unnecessary; and by the operation of the line cutters, as used in his machine, a perfectly even and uniform surface is produced the entire width of the board, and throughout its whole extent from one end to the other. This effect is produced by the cutters being so arranged that the edge of each knife remains at a fixed point whatever may be the position of 52 the heel of the stock, the cutting edge being in the precise line of the centre of the axle of the hinges to which the stock is attached.

Upon the principle on which the Woodworth machine is constructed, a speed of three thousand revolutions is required to plane thirty feet of lumber per minute. Upon the principle on which the Beardslee machine is constructed, a speed of one hundred and thirteen revolutions will plane three hundred feet per minute.

The great speed required by the Woodworth machine is at- 53 tended with hazard to the limbs and life of the operator, and has so proved in very many instances in practical operation. The Beardslee machine on the contrary can plane three hundred feet per minute without the slightest danger to the operator or the bystander.

This deponent further says that the Beardslee planing machine is not only entirely unlike the Woodworth planing machine in its principles, its combinations, its construction and its mode of operation, but it is very far superior to that machine in the simplicity of its structure, the durability of its parts, the ease and 54 economy with which it can be operated, the amount of planing which it performs in a given time with a diminished power, and in the perfection, the uniformity and the beauty of its work.

WILLIAM W. COOK.

Sworn to before me this 24th day of July, 1851.

PAUL F. COOPER, *Commissioner appointed by the United States Circuit Court for the Northern District of New York to take affidavits in and for said District.*

56 UNITED STATES CIRCUIT COURT, { *In Equity.*
NORTHERN DISTRICT OF NEW YORK.

JAMES G. WILSON and JOHN GIBSON,
vs.
GEORGE W. BEARDSLEE.

City and County of Albany, ss :

57 *Jerome B. Bailey*, of Plattsburgh in the county of Clinton, late of Clintonville, in the state of New York, being duly sworn de-
poseth and saith, that he is forty-six years of age; that he is a practical mechanic, draftsman and engineer; that he has de-
voted much attention to the study of the science and principles of mechanics, and to the application of those principles to practical purposes; that for the last twenty-five years he has been exten-
sively engaged in business which required the application of such principles; that for the last eleven years or thereabouts of that period he has been the manager of the Peru Iron Works in the county of Clinton.

58 He further says that he has been acquainted for many years with the Woodworth planing machines; and that he is familiar with the construction, principles and combinations of said machine, and with its mode of operation and results.

He further states that he is well acquainted with the description and claims of the original and amended specifications upon which the patents for such machines were issued.

59 He further states that he is thoroughly acquainted with the planing machine invented by the defendant Beardslee, and now in use at the furnace of Franklin and Theodore Townsend in the city of Albany: that he saw it at different times while the inventor was engaged in its construction: that since its completion he has made repeated and thorough examinations of the machine in all its parts; that he has seen it in operation on various occasions, and is fully conversant with its construction, principles and combinations, and with its mode of operation and results.

60 This deponent further states that he has carefully perused the copy of the bill of complaint in this cause with the copies of affidavits served with the notice of motion for an injunction therein. He further states that the description, in the bill of complaint and affidavits, of the Beardslee machine as compared with the Woodworth planing machine is erroneous; that it is manifestly founded upon a misapprehension of the principles of the Beardslee machine, and an imperfect acquaintance with its construction, its objects and its mode of operation; and that this would be perfectly apparent to any person skilled in the science of mechanics, after a careful and deliberate examination of the two machines in all their parts, and seeing them both in operation.

The Beardslee planing machine not only does not contain the 61 combinations embraced in the claims of the original or amended specifications of the complainant's patent, but it does not contain either of the elements of such combinations, or any device analogous thereto.

The two machines produce different results by different means, and by the application of different mechanical principles. They bear no analogy to each other. The original and amended specifications of the Woodworth patent would not convey to the most skilful mechanic the slightest idea of the Beardslee machine, its principles, operation or results. Nor could a specification 62 which should merely describe the Beardslee machine, its construction and operation, convey to an expert in the science of mechanics an idea of the Woodworth machine, its construction or operation.

The line cutters which are used in the Beardslee machine, could not possibly be used in the Woodworth machine for the purpose of planing. The elastic stocks to which the knives in the Beardslee machine are attached, could not be used in the Woodworth machine to serve the purpose of a pressure roller. It would be impossible for the line cutters used in the Beardslee 63 machine to produce upon a board the undulating or corrugated surface which is produced by the rotating planes of the Woodworth machine. It would be equally impossible for the Woodworth rotating planes to produce upon a board the smooth and uniform surface which is made by the Beardslee machine. It would be utterly impossible for any Woodworth machine, upon the principle of the complainants' patent, to be so constructed as to plane with a given power, and in a given time, one quarter of the amount of lumber which the Beardslee machine would plane with the same power in the same time. The speed of the 64 Woodworth cylinder is necessarily limited, and if it passes beyond a certain maximum, it is exploded by the centrifugal force. The only limit to the Beardslee machine, is the limit of the power of the operators to supply it with boards to be planed. The apparatus for feeding the Woodworth machine as now constructed, or as formerly constructed, would be entirely inappropriate to the Beardslee machine; and if applied to that machine, would not pass a board through in the process of planing, as it would be entirely inadequate to overcome the resistance with which it would meet in the stationary cuts; nor would the feed- 65 ing apparatus used in the Beardslee machine, be adapted to the rotating cutter employed in the machine of the complainants. The belts and gearing which operate the Woodworth machine, are attached to the machine itself, and must be so of necessity from the principle of its construction. In the Beardslee machine it is all beneath the floor, out of the way of the operator, and

66 free from liability to clog or impede the work. Upon the principle on which the Woodworth machine is operated, from the multiplicity of the revolving cuts, each cut being upwards against the grit, the rotating cutters require to be sharpened after planing a given number of *hundreds* of feet; whereas the line cutters in the Beardslee machine will plane an equal number of *thousands* of feet of the same kind of boards without requiring to be sharpened.

This deponent further says that he has carefully perused the foregoing affidavit of William W. Cook, and knows the contents
67 thereof, and that the facts which are therein stated as to the construction, principles, objects, combinations, modes of operation and results of the two machines respectively, the radical dissimilarity of the two to each other, the points of dissimilarity therein stated, and the superiority of the Beardslee machine in the various particulars therein enumerated, are true, as he knows from personal observation and inspection.

This deponent further says that so far from being an infringement upon the complainants' patent, the main features upon which the claim of infringement is based, were ancient and
68 well known principles, long before the original Woodworth patent was obtained; that the principle of the pressure roller, in combination with the line cut, as applied to planing, was one which had long before been described in printed publications; that the principle of an elastic or weighted stock, as applied to planing boards, was one which had long before been described in printed publications; that the principle of applying a series of stationary cutters to planing a moving board, was also an old and familiar practical principle in mechanics, which had been described in printed publications; but what is the leading merit of
69 the Beardslee invention as exhibited in his planing machine, is the new and important, though simple principle, of making the *edge of the cutters stationary*, and *only the heel of the stock* elastic, without varying the graduation of the cut, thus making with the heel of the stock to which the knife is attached *an adjustable throat*, which accommodates itself by its own action to the inequalities of the board, holding the grain of the board close to the cutting edge through the entire series of knives by a diffused and uniform pressure along the whole line of elastic stocks. And this deponent says that in the specifications of the patent for
70 planing wood, granted in 1791, to Samuel Bentham, published in 1796, he describes a series of line cutters, and the process of planing the board, the plane remaining fixed; he also describes weighted stocks in combination with the line cutters; he also describes weighted or pressure rollers as inserted between the cutters near the cutting edge of the knife to keep thin and winding boards away from the knife, and hold them to the bed while

in the operation of planing; he describes a series of line planes, 71 the front knives removing the bulk of the wood, and the last knives set fine for the sake of smoothness; the series of line cutters is described to be of sufficient number to plane the board to a uniform thickness in one operation; and the series of line cuts as forming tongues and grooves in one and the same operation with planing the surface of the board; he describes the process of planing as being practicable with moving line cutters, the board being stationary, or stationary line cutters, the board being in motion.

This deponent further says that the invention of said Beardslee 72 has supplied the great defect in the invention of Bentham, by *making the edge of the cutter stationary, while the heel is elastic and the throat adjustable.*

The novelty and value of the Woodworth invention consists in the combination of Bentham's pressure roller with *the rotating plane.*

The novelty and leading feature of Beardslee's invention is the application to Bentham's *line cutters* (which Woodworth did not adopt) of *the new principle which Beardslee has embodied in his elastic stock.*

73

This deponent further says that as great as the value of the Woodworth invention undoubtedly was, it is scarcely possible that a practical man skilled in the science of mechanics can after a full examination of the two machines and seeing both in operation, discover any feature of identity or similarity in principle, or fail to recognize the very great superiority of the Beardslee planing machine.

JEROME B. BAILEY.

Sworn before me the 24th day of July, 1851.

PAUL F. COOPER, *United States Commissioner*
to take affidavits in and for the Northern District of New York. 74

UNITED STATES CIRCUIT COURT, }
NORTHERN DISTRICT OF NEW YORK. } *In Equity.*

JAMES G. WILSON and JOHN GIBSON,

vs.

GEORGE W. BEARDSLEE.

City and County of Albany, ss:

Franklin Townsend, of the city of Albany, being duly sworn 75 says that he is a practical mechanic; that he has been engaged for many years quite extensively in the manufacture of machinery, and that he has devoted much of his time and attention to the investigation of the principles of the science of mechanics, and their practical operation.

76 This deponent further says that he has for many years known the Woodworth planing machine; that he has at various times constructed work for such machine, and that he is fully conversant with its construction, principles, combinations, mode of operation and results, and that he is also fully conversant with the description and claims of the original and the amended specifications of the Woodworth patent.

He further states that the Beardslee planing machine was constructed at the furnace of this deponent, and under his daily observation; that this is the first and only machine of that kind
77 which has been constructed, and that the same is in successful operation; that he is thoroughly acquainted with the same in each and all its parts, and is perfectly familiar with its construction, principles and combinations, and with its mode of operation and results.

He further states that he has perused the copy complaint and affidavits in this cause served for the purpose of an injunction; and that the same convey an entirely erroneous idea of the Beardslee planing machine as compared with the Woodworth planing machine; that the error manifestly arises from an imperfect acquaintance with the Beardslee machine, and a misconception of its combinations and principles of action.
78

He further says that so far from being an infringement upon the complainants' patent, the Beardslee machine is entirely and radically dissimilar to the Woodworth machine as well in its principles and combinations as in its mode of operation and results. The Beardslee machine not only does not contain the combination of the rotary cutters with the pressure roller to counteract the tendency of the upward cut, but it does not contain either of the elements of such combination or any device analagous thereto.
79

He further says that he has carefully perused the foregoing affidavits of William W. Cook, and Jerome B. Bailey and knows the contents thereof; and that the facts stated in such affidavits respectively in relation to the construction, principles and combinations, modes of operation and results of said respective machines, the dissimilarity of the two to each other, the points of dissimilarity therein stated, and the superiority of the Beardslee machine in the various particulars therein enumerated are true, as he knows from personal observation and inspection.

80 This deponent further says that the granting of a provisional injunction in this case would be attended with the most disastrous consequences, and would subject the defendant to irreparable injury; that since the machine has been in operation great numbers of people from various parts of the Union have come to examine the invention, and to witness its operation; and that its novel character and astonishing results have not only commanded the

admiration of persons acquainted with planing machines, and 81
 men of science and skill in all departments of mechanical pur-
 suits, but have created an extraordinary demand for the machines;
 that said Beardslee before the commencement of this suit had
 already entered into numerous contracts to furnish his machines
 to purchasers; that he had engaged the firm of this deponent
 consisting of himself and Theodore Townsend, who is now ab-
 sent from the city, to manufacture a great number of machines;
 that the extensive demand therefor had made it necessary for the
 firm to make a large increase of their machinery for the purpose
 of manufacturing such machines as required; that they have made 82
 large investments with that view; that they have already many
 of said machines in progress of construction, and that when this
 suit was commenced they had already expended and incurred
 many thousands of dollars in the premises; that said Beardslee
 has invested all his means in such planing machine, and that an
 injunction would not only be greatly detrimental to those who
 have contracted for such machines, and very injurious to this de-
 ponent and others who have entered into engagements with Mr.
 Beardslee on the faith of the undoubted novelty and infinite
 superiority of his machine, but would be attended with almost 83
 certain ruin to the inventor by overwhelming him with liabilities
 for failing to fulfil contracts, from the performance of which he
 would be disabled by such injunction.

This deponent further says that there is no matcher connected
 with the Beardslee planing machine, and that said Beardslee has
 used no matcher therewith, nor any apparatus whatever for
 tonguing or grooving; the machine which he has constructed be-
 ing purely a planing machine. He further says that it would be
 perfectly impossible to use the Woodworth matcher upon the
 Beardslee machine; and that neither the rotating tonguing and 84
 grooving cutters nor any analagous device could be combined
 with said machine for the purpose of tonguing and grooving.

FRANKLIN TOWNSEND.

Sworn before me the 25th day of July 1851.

PAUL F. COOPER, *United States Commissioner*
to take affidavits in and for the Northern District of New York.

UNITED STATES CIRCUIT COURT, { *In Equity.*
 NORTHERN DISTRICT OF NEW YORK, }

JAMES G. WILSON and JOHN GIBSON,

vs.

GEORGE W. BEARDSLEE.

85

City and County of Albany, ss :

Albert Dwelle, of the city of Albany, being duly sworn says
 that he is a machinist, and has been engaged in that business for

86 over twenty years; that he has devoted that period to the investigation of the principles of the science of mechanics and the practical operation thereof; that he has been engaged at different times in the construction of Woodworth planing machines; that he is familiar with the various parts thereof, the principles and combinations thereof and their mode of operation in practical use; that he has examined the claims in the original and amended specifications of the Woodworth patent; that he has carefully examined the Beardslee planing machine at Townsend's furnace, in the city of Albany; has seen it in practical operation, and is
87 familiar with its construction, principles, combinations and mode of operation.

He further says that the Beardslee and Woodworth planing machines are not only not substantially alike, but that the two machines are essentially and fundamentally dissimilar in their construction, combinations and principles of action.

He further states that he has carefully perused the foregoing affidavits of William W. Cook and Jerome B. Bailey, and that the statements therein contained in relation to the construction, principles, combinations and modes of operation of the Beardslee
88 and Woodworth machines respectively, the dissimilarity of the two to each other, the points of dissimilarity therein stated, and the superiority of the Beardslee machine, are true, as he knows from personal observation and inspection.

ALBERT DWELLE.

Sworn before me this 26th day of July 1851.

PAUL F. COOPER, *United States Commissioner*
to take affidavits in and for the Northern District of New York.

89 UNITED STATES CIRCUIT COURT, { *In Equity.*
NORTHERN DISTRICT OF NEW YORK.

JAMES G. WILSON and JOHN GIBSON,

vs.

GEORGE W. BEARDSLEE.

City and County of Albany, ss:

Richard D. Betts, of the city of Albany, being duly sworn deposeseth and saith that he is forty-nine years of age; that he has for a long time been engaged in mechanical pursuits, and has
90 devoted many years to the investigation and practical application of the principles of the science of mechanics; that for most of the time since the year 1840 he has been engaged in operating planing machines, investigating the principles thereof, and making improvements therein; that for several years he used the Woodworth planing machine; that he was thoroughly acquainted with that machine as originally constructed and used under the

patent of 1828; and with the machine as subsequently constructed 91
 and patented by William Woodworth in 1836; and that when
 the plan of construction adopted in 1836 was abandoned, the old
 rotating cutters being preferred to the smaller and more numerous
 knives which had been substituted at that time, he assisted in
 modifying the machines of 1836 so as to make them conform in
 that respect to those constructed under the patent of 1828; and
 that he is entirely familiar with the various modifications which
 have been made from time to time in the Woodworth planing
 machine, and is thoroughly acquainted with the construction
 thereof, and with its principles, combinations and mode of op- 92
 eration.

He further says that he is familiar with the Beardslee planing
 machine, and with each and all its parts, and with its construc-
 tion, principles, combinations and mode of operation. He further
 says that the description of the Beardslee machine as compared
 with the Woodworth machine in the moving papers in this cause
 is manifestly erroneous; and there is an evident misconception of
 the construction and principles of the Beardslee machine, which
 would be apparent at once to any person skilled in the science
 of mechanics, after a full and thorough examination, and after 93
 seeing the two machines in operation.

This deponent further says that the two machines are not only not
 substantially alike, but they are utterly dissimilar in every leading
 feature; and that the Beardslee machine not only does not contain
 the combination of the rotary cutters with the pressure roller to
 counteract the tendency of the upward cut, but it does not contain
 either of the elements of such combination or any device anala-
 gous thereto.

He further says that he has read the foregoing affidavits of
 William W. Cook and Jerome B. Bailey and knows the contents 94
 thereof; and that the statements contained in said affidavits as to
 the construction, principles and combinations, mode of operation
 and results of the Woodworth and Beardslee planing machines
 respectively, the dissimilarity of the two to each other, the points
 of dissimilarity therein stated, and the superiority of the Beardslee
 machine in the various particulars therein enumerated are true,
 as he knows from personal observation and inspection. He fur-
 ther says that the statements in the affidavit of Mr. Bailey as to
 the antiquity of the principles of the series of line cutters, and
 the pressure roller to keep the board to the bed as applied in 95
 combination to the purposes of planing, and the description of
 these and various other principles and devices in the specifica-
 tions of the Bentham patent of 1791, are correct as he has ascer-
 tained in the course of scientific investigation upon the subject
 of the principles of the planing machine.

He further says that the general tendency of the line cutters

96 used in the Beardslee planing machine is not to lift the board upwards from the bed, but to force it firmly upon the bed; in that respect corresponding with the action of the planing machine patented by the celebrated Scottish inventor Malcom Muir in June 1827, after having been about three years in operation. In that machine the cutters, according to the description in the specifications, were line cutters over which the board was drawn by a chain: and the board was pressed firmly to the bed as well as to the cutters by rollers which were made elastic by the use of weights and springs.

97 This deponent further says that with regard to the character of the cutters there is an essential and fundamental difference between the Beardslee and the Woodworth planing machines; that in the Beardslee machine the board is carried through in a true line with the cutting edges of the knives; there is no springing of the board, but it advances steadily in a right line along the whole series of cutting edges.

The substantial difference *in this respect* between the machines of Bentham, Bramah, Muir and Beardslee and the Woodworth machine, consists in this, that *their machines* act in planes parallel
98 to the surface to be removed; *Woodworth's* in vertical curves; that theirs produce an absolute level surface; his a surface apparently level, but in fact corrugated or grooved. But the surface produced by the Beardslee machine is very far superior in every respect to any that can possibly be produced upon a board by the Woodworth machine.

This deponent further says that said Beardslee uses no matcher with his machine, nor any apparatus whatever for tonguing and grooving, the machine which he has constructed being purely a planing machine. He further says that it would be utterly im-
99 practicable to adapt to the Beardslee machine the tonguing and grooving apparatus of the Woodworth patent or the rotary cutters thereof or any analagous device.

This deponent further states that he saw the model of the first machine of William Woodworth built in 1828; that in that machine the mode of operation was as follows: The board to be planed was placed vertically upon a reciprocating carriage, of the length of the material to be planed, and the end of the board was held to its position by a stop or hook attached to the carriage, and by rollers on each side of the cutting cylinder. These rollers were
100 neither designed nor used as feeding rollers. The board as it advanced with the carriage revolved the rollers, instead of being driven by them into the machine. They were smooth and not fluted rollers and there was no gearing attached thereto. The carriage was advanced by means of a rack and pinion, and thus subjected the board to the action of the revolving cutters. It was then drawn back with the board by means of weights, when

another board was placed upon the carriage to be planed in the same mode. There was no endless sectional platform in that machine, nor were there any feeding rollers. It had a rotating cutting cylinder, but no line cutters, no throats and no elastic stocks. It was found not to serve the purpose in practical operation. It produced bad work and did not plane with sufficient despatch. It is true that it resembled the Beardslee machine in one respect, namely, that it received the board in a vertical position, but in other respects it was totally and radically dissimilar, and to describe it as substantially like the Beardslee machine is utterly erroneous; as would appear at once to a person skilled in mechanics after thoroughly examining the Beardslee machine and seeing the same in operation. This first form of construction of the Woodworth machine was soon abandoned, and another was adopted, as follows: In place of the reciprocating carriage a bed immediately under the cutting cylinder was substituted, and feeding rollers as described by Uri Emmons in the patent of 1829, which he had then obtained, and in the manner in which the same are now used in the Woodworth machine with this exception, that the upper rollers were not feed rollers, but were driven by the board. The upper rollers continued to be so used until about the year 1832, when they were geared together, and have since been used as feeding rollers.

This deponent further says that the Beardslee planing machine is not only totally dissimilar to the Woodworth planing machines as now constructed, and as first constructed, but totally dissimilar also in its principles, construction and combinations, to the claims as well of the amended as of the original specifications of the Woodworth patents.

This deponent further states that in a suit between John Gibson, one of the complainants, and Betts and Littlefield, some years since, the complainant James G. Wilson, was called as a witness on the part of said Gibson, and testified among other things, that the Woodworth patent of 1845 claimed the combination of the rotating planes with the pressure roller, to counteract the tendency of the upward cut, but that they did not claim under their patent the feed of the machine, nor any mode or manner of feed; that he does not know that he has given the precise words of said Wilson, but that he well remembers his testimony upon that point, and this was the substance of such testimony.

RIC'D D. BETTS.

Sworn before me this 26th day of July 1851.

PAUL F. COOPER, *United States Commissioner*
to take affidavits in and for the Northern District of New York.

106 UNITED STATES CIRCUIT COURT, { *In Equity.*
NORTHERN DISTRICT OF NEW YORK,

JAMES G. WILSON and JOHN GIBSON,;

vs.

GEORGE W. BEARDSLEE.

City and County of Albany, ss :

107 *John G. Stephenson*, of the city of Albany, being duly sworn says that he is a draftsman, engineer and machinist; that he has been engaged in mechanical pursuits for about twenty years; that he has devoted most of his time for that period to the investigation of the principles of the science of mechanics and the practical application thereof; that for about two years of this time he was with George Stephenson, the builder of the first locomotive steam engine in Great Britain, and Robert Stephenson, who is regarded as the first civil engineer in England; that deponent has had great facilities for becoming acquainted with the principles and operation of machinery; and that when he came to America he was sent by a British company to Nova Scotia upon the recommendation of John Carr & Co. of New Castle to superintend the construction and erection of steam engines and mills and the operation thereof in the county of Cumberland. This deponent subsequently removed to the United States, and resided for a time in the city of Buffalo and more recently in the city of Albany.

108 He further says that since his removal to this country he became acquainted with the Woodworth planing machine; that he has frequently seen it in operation, and is thoroughly familiar with its construction, principles, combinations and mode of operation.

109 He further says that he is perfectly conversant with the Beardslee planing machine now in operation at Townsends' furnace in the city of Albany; that it is the only machine to his knowledge which was ever constructed by said Beardslee on that or any similar plan; that it is the same for which said Beardslee obtained his patent in May last; that he was engaged with said Beardslee when the same, with the model thereof in the patent office, and the model thereof now in the possession of said Beardslee were constructed; that those two are the only models thereof in existence to the knowledge of this deponent; that they were both completed before the completion of the machine; that the machine was built in conformity with the model now in possession of said Beardslee; and that such model is a correct representation of said machine in all its parts, its principles of construction and mode of operation, as far as it is practicable to assimilate a wooden model to a metallic machine of increased dimensions.

110 He further states that he was with said Beardslee through the whole progress of the invention, and that under the superintend-

ence and direction of Mr. Beardslee he constructed the same in all its parts. 111

He further says that the Beardslee machine and the Woodworth machine are utterly dissimilar in their principles, their combinations, their modes of operation and results; that he has carefully examined the specifications of the several patents for such machines respectively, as well as the machines themselves; that he is utterly unable to discover any point of resemblance or analogy between the claims of the two machines respectively, or any common ground for conflict between the same.

He further says that about twelve years since, he was acquainted with a planing machine operated by Carr & Harle at the St. Lawrence planing mills of Newcastle-upon-Tyne, in Northumberland county, England, which was said to be an old Scotch invention; that he has since seen authentic copies of the drawings and specifications of the patent granted to Malcom Muir in 1827, and that he recognized the same at once as the machine which he had seen operated at the Carr & Harle mills; that the principles and operation thereof were as stated in the affidavit of Richard D. Betts, made for the purpose of opposing the application for an injunction in this cause. 112

He further says that he has carefully perused the foregoing affidavits of William W. Cook and Jerome B. Bailey and knows the contents thereof; and that the facts stated in such affidavits respectively in relation to the construction, principles and combinations, modes of operation and results of said respective machines, the dissimilarity of the two to each other, the points of dissimilarity therein stated, and the superiority of the Beardslee machine in the various particulars as therein enumerated, are true, as he knows from personal observation and inspection. 113

He further states that he has perused the foregoing affidavit of Franklin Townsend, and knows the contents thereof, and that the facts which are therein stated in relation to the contracts and engagements of said Beardslee, and the consequences to him, to the firm of Messrs. F. & T. Townsend and to those who have entered into engagements with said Beardslee, if an injunction should be granted, are true. 114

He further says that said Beardslee has no tonguing or grooving apparatus connected with said machine; that neither to his knowledge, information nor belief, has said Beardslee ever at any time contemplated using the Woodworth apparatus for that purpose, and that it would be impossible to use the rotating cutters with that view in the Beardslee machine, or to adapt thereto the complainants' device for tonguing and grooving, or any analagous combination or device whatever. 115

He further says that to the best of his knowledge, information and belief, the complainant James G. Wilson, whose affidavit is

116 subjoined to the copy complaint in this cause has never seen the
Beardslee planing machine; that deponent has always been pre-
sent when the machine was in operation, and that it is scarcely
possible that said Wilson should have been present when the
same was in operation without any knowledge or information
thereof on the part of this deponent.

JOHN G. STEPHENSON.

Sworn before me, this 28th day of July 1851.

PAUL F. COOPER, *United States Commissioner*
to take affidavits in and for the Northern District of New York.

117

UNITED STATES CIRCUIT COURT, { *In Equity.*
NORTHERN DISTRICT OF NEW YORK. }

JAMES G. WILSON and JOHN GIBSON,

vs.
GEORGE W. BEARDSLEE.

City and County of Albany, ss :

118

Richard V. DeWitt, of the city of Albany, being duly sworn
deposeth and saith that for over thirty years he has devoted much
of his time and attention to the investigation of the principles of
the science of mechanics; and that he has for several years past
been engaged in the business and profession of patent attorney,
and in that capacity has had occasion very frequently to examine
and investigate the various operations of machinery.

119

He further says that he is familiar with the construction and
mode of operation of the Woodworth planing machine, and that
he has perused the description and claims contained in the original
and amended specifications of the Woodworth patent in their
published form; that he has examined the principles of construc-
tion, arrangements and combinations of the Beardslee planing
machine at the furnace of the Messrs. Townsend in Albany, and
has seen the same in practical operation.

He further states that he has been unable to discover upon
examination of the Beardslee machine, the combinations of me-
chanism claimed in the Woodworth specifications or amended
specifications, or either of the elements of such combinations or
any device analagous thereto.

120

This deponent has examined the affidavits of Messrs. William
W. Cook and Jerome B. Bailey, made for the purpose of opposing
the application for an injunction in this cause, and coincides with
them in their views of the Beardslee and the Woodworth planing
machines, their respective characteristics, and the entire dissimi-
larity of the two machines in their construction, combinations
and principles of action.

He further states that he has never acted as the attorney, agent

or counsel for Mr. Beardslee, and that he has no interest whatever in favor of either party upon any of the questions depending between them. 121

RICH'D VARICK DE WITT.

Sworn before me this 26th day of July 1851.

PAUL F. COOPER, *United States Commissioner*
to take affidavits in and for the Northern District of New York.

UNITED STATES CIRCUIT COURT, } *In Equity.*
NORTHERN DISTRICT OF NEW YORK,

JAMES G. WILSON and JOHN GIBSON, 122

vs.

GEORGE W. BEARDSLEE.

Northern District of New York, Albany City and County, ss :

Edmond L. Shepard, of Rockton in the town of Little Falls, in the county of Herkimer and state of New York, being duly sworn depose and saith, that he is forty-eight years of age; that he is by occupation a millwright, that he has been engaged in mechanical pursuits for the last twenty-seven years, and that he is well acquainted with the practical operation of machinery. 123

This deponent further says that he is well acquainted with the Woodworth Planing Machine; that he has read and carefully examined the specifications and claims upon which the original patent issued in December 1828, and also the amended specifications of 1845. He further says that he has often examined the machines in use, known as the Woodworth Planing Machine, that he has often seen them in operation, and that he fully understands the principles of their operation. He further says that from his long experience, and practical acquaintance with machinery, he believes himself to be fully competent to understand such claims, specifications and amended specifications, and the principles and practical operation of the machines constructed by or under the authority of the complainants. 124

He further says that he has seen in operation, and has fully and carefully examined the planing machine owned, operated and patented by George W. Beardslee, at Townsend's Furnace in the city of Albany.

This deponent further states that the Beardslee planing machine is in no respect like the complainants' or Woodworth planing machine, either in its construction, its operation, or its mode of cut; that the Beardslee planing machine has no rotating cutters, or cutter wheels: nor is there in or about such machine any thing analagous to such cutters or wheels; that the Beardslee machine has no pressure rollers, nor any analagous device whatever, either in combination with rotating cutters or cut- 125

126 ter wheels, or in combination with any other cutter; nor are there in the Beardslee planing machine, pressure rollers for the purpose of holding the boards or other material to the bed, to prevent the same from being drawn up by the planes, or from the reduced or planed to the unplaned surface, or toward the centre of the cutter wheels. He further says that the feeding rollers in the Beardslee machine are used and employed only to feed the boards or material to be planed.

127 He further says that the mode of cut in said machine, does not in any way depend upon the board being kept to the bed by feeding rollers, but these are removed from the cutters to the distance of one foot; and therefore can not perform the office of holding the board down to the bed, and thereby counteracting the supposed tendency of the cutters to raise it, even if such tendency existed in the Beardslee machine.

128 He further states that in the defendant's planing machine, the boards or other material are reduced to a uniform thickness by a series of cutters placed across the machine, whose edges are graduated and fixed at any desired point above the bed. The board or other material is reduced by said cutters successively entering at the end, and each removing a shaving of the thickness of the respective graduations, in straight lines parallel to the bed upon which the board rests; each knife producing a shaving of the entire length and width of the board, the shaving being continued and uncut.

He further states that the line cutters used in the Beardslee machine, are in their practical operation like a series of cuts made by the hand plane.

129 The tendency of the cut in the defendant's machine is not to raise the board when planing in the direction of the grain, and this is the uniform mode of cutting with the Beardslee machine. When lumber is planed in the direction of the grain, as it is in the defendant's machine, the cutting edges of the knives press the board towards the bed; instead of elevating it from the bed, which is the tendency of the rotating cut used in the Woodworth machine.

130 He further says, that the first cutter in the Beardslee machine has a fixed throat, and the heel of each successive stock is made elastic, not for the purpose of holding the board to the bed, for that effect would be produced by a fixed stock, but for the purpose of forming a self adjusting throat, immediately in advance of the cutting edge of each successive knife; and the yielding throat so formed, accommodates itself to the inequalities of the board or material planed. This elastic stock is controlled completely by a spring at one end, but an elastic roller is controlled by a spring at each end.

The stock in the Beardslee machine yields from the central point of the axle in line with the cutting edge of the knife. 131

There are no bar mouth pieces in the Beardslee machine except the fixed one upon the head stock.

This deponent further states, that the endless sectional platform used in said machine for the purpose of a continued carrying surface or bed, passing boards in continued succession, making a perfect feeding conveyer of the material to be planed upon a lubricated bed, is a mechanical device, far superior to that used in the Woodworth machine.

He further states that the said Beardslee planing machine does not in any of its features resemble or contain any of the modes of operation used in the Woodworth machine, nor does it contain any of its principles or combinations. The two machines are entirely unlike in their respective principles and combinations, as well as in their modes of operation and the results produced. 132

The only essential feature which the two machines possess in common, is that they both plane boards.

He further states that the mode of cut used in the Woodworth machine, necessarily limits the amount it will plane to from thirty to forty feet per minute; but the Beardslee machine, on the contrary, is not thus limited, but is capable of planing from 200 to 300 feet per minute, and producing a uniformity of thickness, and a smoothness of surface not equalled by the work of the Woodworth machine, or any rotating cutter. 133

This deponent further says that there is no matcher in operation connected with the Beardslee planing machine.

E. L. SHEPARD.

Taken, subscribed and sworn to before me, this 19th day of July, A. D. 1851, at City of Albany, N. Y.

R. J. HILTON, *United States Commissioner, &c., for Northern District of New York.* 134

UNITED STATES CIRCUIT COURT, { *In Equity.*
NORTHERN DISTRICT OF NEW YORK. }

JAMES G. WILSON and JOHN GIBSON,
vs.
GEORGE W. BEARDSLEE.

State of New York, Albany City and County, ss :

William B. Houghton, of Little Falls, in the county of Herkimer, being duly sworn, deposeth and saith that he is 42 years of age, and has been in mechanical pursuits for many years, and that he is well acquainted with the principles and operation of machinery. 135

136 This deponent further states that he for many years owned and operated one of the Woodworth planing machines, that he is familiarly and thoroughly acquainted with its principles and modes of operation.

He further states that he has seen the Beardslee planing machine in operation; that he has examined it with great care and attention, and is acquainted with the principles of its construction and mode of operation.

137 He further says that he has read the foregoing affidavit of Edmond L. Shepard, and knows the contents thereof, and that the facts therein stated, as to the difference between the two machines and their principles and mode of operation are true.

WM. B. HOUGHTON.

Taken, subscribed and sworn to before me, this 19th day of July, A. D. 1851, at City of Albany, N. Y.

R. J. HILTON, *United States Commissioner, &c.,*
for Northern District of New York.

UNITED STATES CIRCUIT COURT, { *In Equity.*
NORTHERN DISTRICT OF NEW YORK, }

138 JAMES G. WILSON and JOHN GIBSON,
vs.
GEORGE W. BEARDSLEE.

State of New York, City and County of Albany, ss :

George Heath, of Little Falls in the county of Herkimer, being duly sworn, deposeth and saith, that he is 48 years of age; that he is a machinist by occupation, and that he has for the last thirty years been engaged in mechanical pursuits, and in the study and practice of the principles involved in the operation of machinery.

139 This deponent further says that he has put in operation and run the Woodworth planing machine; that he is intimately and thoroughly acquainted with its principles of construction, and its mode of operation.

He further states that he has examined the original and amended specifications of the Woodworth patent, and understands the claims made on the part of the inventor and the complainants.

140 He further states that he has seen the Beardslee planing machine in operation, that he has examined it thoroughly and carefully, and is acquainted with the principles of its construction and its mode of operation.

He further states that he has read the foregoing affidavit of Edmond L. Shepard, and knows the contents thereof; and that the facts therein stated as to the two machines in question, their

respective principles, combinations and mode of construction and operation, and their entire dissimilarity are in all respects true, as this deponent knows from personal examination and investigation. 141

GEO. HEATH.

Taken, subscribed and sworn to before me, this 19th day of July, A. D. 1851, at City of Albany, N. Y.

R. J. HILTON, *United States Commissioner for
Northern District of New York.*

UNITED STATES CIRCUIT COURT, { *In Equity.*
NORTHERN DISTRICT OF NEW YORK. 142

JAMES G. WILSON and JOHN GIBSON,

vs.
GEORGE W. BEARDSLEE.

State of New York, City and County of Albany, ss :

Samuel H. Alexander, of Little Falls, in the county of Herkimer, being duly sworn, deposeth and saith, that he is 40 years of age, that he is a practical mechanic, and that for the last twelve years he has been especially engaged in building and operating machinery. He further states that in the practical operation of planing machines, and in the investigation of the principles of different machines employed for that purpose, he has obtained a thorough acquaintance with the mode of construction, principles and combinations of the Woodworth planing machine; and that he has carefully examined the specifications and amended specifications of the Woodworth invention, and believes he fully understands the same. 143

He further states that he has seen the defendant's machine in practical operation; that he has thoroughly examined the same, and understands its principles of construction and operation. 144

He further states that he has read the foregoing affidavit of Edmond L. Shepard, and knows the contents thereof, and that the facts therein stated, as to the principles and modes of construction and operation of the two machines respectively, and the entire dissimilarity of each to the other in every essential feature is true, as this deponent knows from his personal acquaintance with such facts, and his examination and comparison of the two machines.

SAMUEL H. ALEXANDER.

Taken, subscribed and sworn to before me, this 19th July, 1851, at City of Albany, N. Y. 145

R. J. HILTON, *United States Commissioner, &c.,
for Northern District of New York.*

146 UNITED STATES CIRCUIT COURT, { *In Equity.*
NORTHERN DISTRICT OF NEW YORK, }

JAMES G. WILSON and JOHN GIBSON,

vs.

GEORGE W. BEARDSLEE.

City and County of Albany, in said District, ss :

147 *Albert J. Steele*, of Humphreysville, in the county of New Haven and state of Connecticut, being duly sworn deposeth and saith that he is thirty-nine years of age and has been in mechanical pursuits for more than twenty years past, and that he is well acquainted with the principles and operation of machinery.

He further says that he and his partners are and for a long time have been in the enjoyment of the right to use three of the Woodworth planing machines, and that as one of the owners, he has had the best facilities for becoming familiar with these machines, and is thoroughly acquainted with the principles and mode of construction and operation thereof.

148 He further states that he has seen the Beardslee planing machine at different times in operation; that he has examined it with great care and attention, and is acquainted with the principles of its construction and mode of operation.

He further says that he has read the foregoing affidavit of Edmond L. Shepard and knows the contents thereof, and that the facts therein stated as to the difference between the two machines and their principles and mode of operation are true in all respects, as this deponent knows from personal examination and investigation.

ALBERT J. STEELE.

Subscribed and sworn to before me, this 23d day of July, A. D. 1851, at city of Albany, N. Y.

149 R. J. HILTON, *United States Commissioner, &c.*
for Northern District of New York.

UNITED STATES CIRCUIT COURT, { *In Equity.*
NORTHERN DISTRICT OF NEW YORK. }

JOHN GIBSON and JAMES G. WILSON, Complainants,

vs.

GEORGE W. BEARDSLEE, Defendant.

150 *State of New York, Onondaga County, ss :*

George Stevens, of the city of Syracuse in said county, salt manufacturer, being first duly sworn deposeth and saith, that he is of the age of forty-three years, and that he was by trade a carpenter and joiner, and that he worked at that business during the

years 1827, 1828 and 1829; that in the year 1828 he worked in the city of New York near the Dry Dock; that he had worked before at Syracuse and there saw and became acquainted with a planing machine put up at that place by Uri Emmons; that in the year 1828 he saw the machine put in operation at New York under the Woodworth patent; that in that machine, according to his recollection, the cutting instrument was a vertical cylinder with knives set diagonally—the cylinder about sixteen inches in diameter, and cutting with the motion of the board which was moved forward upon a carriage by a rack and pinion. That this machine did not do a very good business, and the next year the form was changed for a smaller horizontal cylinder, cutting against the motion of the board. The machine first mentioned was the one first put in operation at the Dry Dock. 151 152

Deponent further says that he has seen and examined the planing machine put in operation by the defendant Beardslee at the foundry of Messrs. Townsend in Albany; that he saw the machine in operation and examined it; that it differs from the Woodworth machine essentially in its form, principles and mode of operation; that in his judgment it is a decidedly improved method of planing; that it planes with much greater rapidity, and with a much better finish; that in his judgment said machine is no infringement upon the Woodworth patent; that he is well acquainted with the machines run under that patent, has frequently seen them in operation, and has read the specifications of the patent of 1828, and also of the amended patent of 1845. 153

GEORGE STEVENS.

Sworn before me this 28th day of July, A. D. 1851.

D. PRATT, *Justice Sup. Court.*

CIRCUIT COURT OF THE UNITED STATES, } *In Equity.* 154
FOR THE NORTHERN DISTRICT OF NEW YORK.

JAMES G. WILSON and JOHN GIBSON,

vs.

GEORGE W. BEARDSLEE.

Southern District of New York, ss:

John Steele of the city of New York, being duly sworn, says, that he is a Scotchman by birth, and resided in Scotland until the year 1828; that for the period of seven or eight years next before 1828, he resided in the city of Glasgow; deponent became acquainted with Malcom Muir, of that city, in 1819. He was then sawing veneers and making blocks for ship work in the town of Greenock, and was running the first saw for sawing veneers ever put in operation in Scotland, to the best of deponent's information and belief. In 1822, he removed from Greenock 155

156 to Glasgow; in 1824, he commenced working his planing machine for planing, tonguing and grooving boards and plank; late in the fall of 1825, he commenced working the machine; it worked well; this machine was in all substantial respects the same as that described and represented in the specifications and drawings enrolled with the patent granted to said Muir for said machine, on the first day of June, 1827, a correct copy of which specifications and drawings are, as deponent verily believes, hereunto annexed. The first machine put in operation as aforesaid, was destroyed by fire in the winter of 1826 and 1827. He immediately commenced building another planing machine and establishment, and completed them, as near as deponent can recollect, late in the spring of 1827. That machine was in all respects like the one first constructed by him, except that he combined with this a planing cylinder, similar to that used in the Woodworth machine for the purpose of reducing the boards and plank to an equal thickness throughout. This planing cylinder was longer than the whole width of the board to be planed, and consequently reduced the entire width of the board as is done in the Woodworth machine. This cylinder could be removed at pleasure; the object of using it was to prevent the necessity of dubbing the boards on that side upon which the narrow cutters reduced it upon its edges to an equal thickness as described in the patent. This machine was in use from the time it was built, until deponent left Scotland in 1828. It worked remarkably well, doing as good work, planing, tonguing and grooving, as deponent ever saw done with any machine, and deponent is well acquainted with the planing machines generally used in this country. Deponent is informed and believes, that several machines like this, are in use in Glasgow, Leith and London.

JOHN STEELE.

Subscribed and sworn to before me, July 29th, 1851,

GEO. W. MORTON, *U. S. Co n.*

NOTE—Annexed to the original affidavit are the drawings and specifications referred to.

UNITED STATES CIRCUIT COURT, { *In Equity.*
NORTHERN DISTRICT OF NEW YORK, }

JAMES G. WILSON and JOHN GIBSON,

vs.

GEORGE W. BEARDSLEE.

160 *City and County of Albany, ss :*

John F. Winslow, of the city of Troy, being duly sworn says that he is one of the proprietors of the Albany Iron Works at the city of Troy; that he has had occasion to devote much attention

to the principles of the science of mechanics, and the practical application of those principles; that he is acquainted with the Woodworth planing machine and the principles of its operation; that he has examined the Beardslee planing machine at Townsends' Furnace in the city of Albany, and thinks he understands the principles of its construction and operation; that he is unable to discover any substantial identity between the two machines in their principles or combinations; and that in his judgment the Beardslee planing machine is an invention of great merit, and involving a new and valuable combination of mechanical principles and devices for the purposes for which it is designed.

JNO. F. WINSLOW.

Sworn before me this 25th day of July 1851.

PAUL F. COOPER, *United States Commissioner*
to take affidavits in and for the Northern District of New York.

UNITED STATES CIRCUIT COURT, } *In Equity.*
NORTHERN DISTRICT OF NEW YORK.

JAMES G. WILSON and JOHN GIBSON,

vs.

GEORGE W. BEARDSLEE.

State of New York, City and County of Albany, ss:

Erastus Corning, John Townsend, Sherman Croswell, Arlond Carroll and Alanson Sumner, of the city of Albany, being severally sworn, each for himself says, that he has seen the operation of the Beardslee planing machine and the Woodworth planing machine; that the two machines appear to be entirely dissimilar in their principles, construction and mode of operation; that he has seen the Beardslee machine, when the engine was running at a moderate rate of speed, plane boards at a rate exceeding one hundred feet per minute, producing a quality of work superior to any he has before seen, whether made by the hand plane or by other planing machines. The number of boards which can be fed into the machine seems to be the only limit of its capacity. The arrangement of its parts is equally simple and beautiful, and as this deponent believes, the invention is one of superior merit and very great practical value.

ERASTUS CORNING,
JOHN TOWNSEND,
SHERMAN CROSWELL.
ARLOND CARROLL,
ALANSON SUMNER.

Sworn to before me this 26th day of July 1851.

PAUL F. COOPER, *United States Commissioner*
to take affidavits in and for the Northern District of New York.

166 UNITED STATES CIRCUIT COURT, { *In Equity.*
NORTHERN DISTRICT OF NEW YORK,

JAMES G. WILSON and JOHN GIBSON,

^{vs}
GEORGE W. BEARDSLEE.

City and County of Albany, ss :

George W. Beardslee, of the city of Albany, the defendant in this cause, being duly sworn, deposeth and saith: that he is thirty-nine years of age; that he is a practical machinist, architect and engineer, and that he is thoroughly acquainted with planing machines, their principles of construction and modes of operation.

167 In the year 1824, when he was but fourteen years of age, he applied a tobacco engine with rotating cutters to the purpose of planing lumber, in the then village of Rochester. Between that time and the year 1827, he saw various planing machines in operation, and investigated their principles and mode of construction. One of these was in a coopering establishment at Rochester. It was operated by water power, and was constructed substantially upon the plan of the machine patented by Bramah, in 1802, but differing from that in this particular, that the material planed was fed through the machine by rollers, substantially in the manner described in the Uri Emmons patent of 1829, and since adopted in the construction of the Woodworth planing machine; and that one of the rollers in the machine described by deponent, was a spring roller. The machine was used for the purpose of planing pine lumber and staves. The surface was reduced by a planing wheel with cutters upon its disk, like the Bramah wheel. The edges were jointed by line cutters, operating upon the principle described by Sir Samuel Bentham, in his patent of 1791. The machine was owned and operated by Pierce Darrow. Other machines of a similar character were owned and operated by Mr. Hawley, who carried on a sash and blind establishment, in the the same building occupied by Col. Darrow. These were used in planing and working sash stuff, and the planing was done by a series of line cutters, arranged and operating upon the principle described in the Bentham patent of 1791.

168 In the year 1829, arrangements were made between deponent's father and William Woodworth, since deceased, for a connection in the business of planing lumber at Rochester. But the machine as first constructed under the patent of 1828, proved to be a failure in practical operation, and deponent's father for that reason declined to consummate the arrangement. This deponent examined the machine, saw it in operation, and remembers it distinctly. His recollection of the character and mode of operation of that machine, corresponds with the description of the first Woodworth machines, as given in the foregoing affidavit of Richard D. Betts.

In the year 1832, he saw a Woodworth machine in operation in the city of Troy, which was constructed in a different manner. The board was introduced into the machine in a horizontal position by a feed roller below. The roller above was not geared, but revolved by the board as it entered the machine. The Woodworth machines are now constructed with feed rollers, above as well as below, and are provided with a pressure roller after the cylinder. 171

He further says, that from 1846 to 1849, he was engaged as superintendent of the planing mill of P. B. & L. L. Eaton of Buffalo; and in that capacity was familiar with the Woodworth planing machines, which were put up and operated under his supervision; and that he superintended the construction of machines of that description. This deponent is well acquainted with the principles, combinations and mode of operation of the Woodworth planing machines, and is entirely familiar with the descriptions and claims of the original and amended specifications of the Woodworth patents. 172

He further says, that for most of the last two years he has been extensively engaged in the operation and construction of machines for planing, tonguing and grooving boards, in which no rotating cutters were used; and that from the year 1839, he was engaged for about six years, in the construction and operation of machines, some of which were built upon the general plan of the Bramah patent of 1802, and others upon the plan of the Bentham patent of 1793; and that neither of the classes of machines so constructed by him, were ever held, so far as he is aware, to be infringements upon the Woodworth patent. 173

He further states that he has carefully and repeatedly perused the copies of the bill of complaint and the affidavits attached thereto, which were served upon him with the notice of motion for an injunction in this cause.

He further says that the allegations therein contained in various forms, of substantial identity between the planing machine of this deponent, and the Woodworth planing machine are utterly unfounded, whether applied to that machine as first constructed, or in either of its subsequent forms of construction. Those allegations, and the allegations in various forms of the use by deponent in his machine of devices analogous to the rotating planes, and to the rollers to counteract the tendency of the upward cut in the Woodworth machine, are so utterly unfounded that this deponent can only reconcile them with good faith, by attributing them to an imperfect acquaintance with the construction and mode of operation of deponent's planing machine, and a misconception of the mechanical principles which it involves. He further states that he knows James G. Wilson; that he has never seen him since he commenced the construction of the machine; 174 175

176 that said Wilson has never seen the machine of deponent which he describes, to the knowledge, information or belief of this deponent; and that it is scarcely possible, from various circumstances, that he should have seen it without deponent being acquainted with that fact. Two of the witnesses, as deponent is informed and believes, are workmen in the employment of the complainant Gibson, and none of the witnesses whose affidavits are used on the part of the complainant have made such examinations of deponent's machine in its mode of construction, and principles of operation, as to entitle their opinions to the same weight with the opinions of most deponent's witnesses.

177 This deponent further says that his machine contains neither the combinations claimed in the Woodworth patent, nor either of the elements of such combinations, nor any device analagous thereto.

He further says that in his machine there are novel features, not embraced in the claims of his present patent; but that with the exception of what he has himself invented, there is not in his whole machine a single principle, which was not a well known principle, nor a single device which was not a well known device, as applied to the planing of boards long before the original Woodworth invention.

178 He utterly denies that his machine is in any respect whatever, an infringement upon the complainant's patents, or either of them. On the contrary the two are totally dissimilar as well in their construction and combinations, as in their principles and modes of operation.

The rotating cutters of the one bear no analogy to the line planes of the other. The upward cut of the one does not exist in the other. The tendency of the upward cut is to lift the board with the knife, and *requires an opposing force to counteract it*. The tendency of the parallel cut is to hold the board to the bed. The pressure roller if it could be applied to the parallel cut would constitute an *auxiliary* instead of *opposing* force. The devices are different, the objects different, the combinations different, and the modes of operation and results are not only not analagous, but bear no resemblance to each other.

179 He further states that he knows the contents of the affidavits of William McCammon, William W. Cook, and Jerome B. Bailey, made for the purpose of opposing the application for an injunction; and that the statements contained therein, as to the various features of dissimilarity between the machine of deponent, and the Woodworth planing machine, respectively enumerated in said affidavits are true; that a correct description is given in said affidavits of the combinations, construction, principles of action and results of deponent's machine; and that the relative superiority of his to the Woodworth machine, both in its capacity and the quality of its work is truly represented therein.

180

He further says that the feed rollers in the Woodworth machine constituted no part of the claim of either of the Woodworth patents; that William Woodworth in addition to the patents set forth in the bill of complaint, obtained in November, 1836, a patent for "a new and useful machine for reducing to an equal thickness, and smoothing one or both sides of boards or plank for ceiling or flooring or any other purpose, and for jointing or grooving the same at one operation, called Woodworth's reducing and smoothing plane machine;" that in his specifications he describes among other things used in his machine "a series of rollers made of iron or any other convenient material, attached to a frame by pairs, one above the other, horizontally, and at right angles with the bed pieces of the frame, and a sufficient number at proper distances *to forward boards or plank between the rollers when put in motion, past all the reducing and smoothing operation.*" He also says, that "the pressure is downwards by weighted levers, or springs on the top rollers." After stating his claim, he adds: "circular saws and smothing planes are tools in common use. Circular saws attached to shafts for tonguing and grooving have been used by the Shakers many years. Shafts, rollers, connecting wheels, pullies and bands, are also *in general use for forwarding motion, for propelling iron, boards, timber, &c.,* all which are "not claimed by me." Deponent further says that these specifications are set forth in the pleadings in a suit in the old court of chancery, in the state of New York, between the complainant, John Gibson, and William Woodworth, the patentee, the same being now on file in the office of the clerk of the Court of Appeals of this state; and that since discovering the same, he has not had time to procure an exemplified copy thereof; the original specifications having been consumed with the patent office by fire, as he is informed and believes.

He further states that a work was published in 1843, which has been extensively distributed by the complainant, James G. Wilson, a copy of which is now before this deponent, and of the title page, of which the following is a copy,

DRAWING AND EXPLANATIONS

OF

W. WOODWORTH'S PATENT PLANING MACHINE, AND THE EXTENSION, &c., &c., &c.

BY J. G. WILSON,
NEW YORK.

ROBERT CRAIGHEAD, PRINTER, 112 FULTON STREET.
1843.

186 He further states that as he has been uniformly informed and believes, said work was published by the complainant Wilson. He further states that the last document published in said work, is a letter from Charles M. Keller, dated Washington, D. C., May 5th, 1843, which contains, among other things, the following passage,

187 “The manner of feeding in the boards so as to be presented in a proper manner to the action of the cutters, is described in Woodworth’s patent in an indefinite manner, as being a matter of secondary consideration, the claim not resting on any part of it; and, as there described, the boards to be planed, &c., are placed in succession on a carriage, which may be operated by rollers, or rack and pinion, and guided in the same manner as a saw mill carriage, it being necessary, of course, to guide it in a straight line to insure straight edges to the board, to make a good fit in the tongues and grooves. In Emmons’s patent it is described (the feeding in of the boards) as being effected by means of a carriage, or by passing the boards without a carriage between an upper and a lower set of feed-rollers, the lower set being operated by band or cog-wheels, and the upper set acting merely as pressure-rollers. Both of these methods of feeding in are claimed by Emmons in his patent.

188 “The machines in general use are in this particular made in accordance with one of the modes of feeding described by Emmons, viz: the rollers without the carriage; but it should be kept in mind that this method of feeding in had long before been known and used for other purposes; and whether he had a right to claim its application to a planing machine, is a matter of great doubt in my mind.”

189 This deponent further says that even if there were doubt as to whether the feeding rollers of Emmons were patentable, that patent has expired; and he submits that the complainants can not exclude him from the use of feeding rollers; and he further submits that the patent of Emmons was in that respect invalid, as the feeding rollers had been applied to the purpose of planing wood long before either the Emmons or Woodworth patents.

190 This deponent further says that there is no foundation whatever for the allegation in the complaint, that this deponent and his agents are about to erect and have threatened to erect in connection with his planing machine, one or more tonguing and grooving machines, which are substantially the same in principle and mode of operation as the machine patented by William Woodworth, described in the bill of complaint and the amended specification in the renewed patent; but he is constrained to say that such allegation is untrue in each and all its parts. He is not and has not been engaged in erecting any such machine. He has not made nor has he been about to make any such erection.

He has neither threatened it nor intended it, nor expressed any such intention, either to Mr. Wilson or to any human being. He has not spoken with Mr. Wilson nor seen him since he commenced the construction of the first model of his machine. He has no agent, nor has he had any during the progress of the work. 191

He further says that the Woodworth machine for tonguing and grooving would be totally impracticable with deponent's planing machine; that he could not use it if he would, nor could he use any thing substantially like it; nor could the rotary cutters be adapted to his machine for the purpose of tonguing and grooving. But this deponent is engaged in constructing, and has nearly completed a tonguing and grooving apparatus which he designs to use with his planing machine. It embodies the essential features of a tonguing and grooving apparatus, which has recently been invented and tested by experiment upon another planing machine, and which is not only entirely different in principle and construction from the Woodworth tonguing and grooving apparatus, but very far superior thereto or to any other now in use. It is made with a series of line cutters, of a peculiar form, fixed in stocks, graduated in a peculiar manner, and producing continued shavings in the mode described in the Bentham patent of 1791. It has no rotating cutters, no cutter wheels, no upward cut, and no rollers or other analagous device to keep the board steady or to counteract the tendency of a cutter wheel. In the operation of forming a tongue and groove by this apparatus, the board will be steadied and guided by the stocks and cutters themselves, as in the old hand match plane. 192 193

This deponent further says that he has read the foregoing affidavit of Franklin Townsend and knows the contents thereof, and that the statements therein contained, as to the situation, contracts and engagements of this deponent in relation to his planing machine, and the disastrous consequences to himself and to others which would be involved if an injunction should be granted in this cause, are true in every particular. 194

He further states that what he claims and insists is, not that the Woodworth patent is invalid but that his machine is in no respect an infringement thereon. GEO. W. BEARDSLEE. 195

Subscribed and sworn before me this 28th day of July 1851, at city of Albany, N. Y.

R. J. HILTON, *United States Commissioner, &c.*
for Northern District of New York. 196

